

Genital fixed drug eruptions

V H SEHGAL AND O P GANGWANI

From the Department of Dermatology and Venereology, Maulana Azad Medical College and Associated LNJP and GB Pant Hospitals, New Delhi, India

SUMMARY Twenty nine patients with genital fixed drug eruptions were studied during one year. In 15 the genitalia were exclusively affected, whereas the other 14 had cutaneous lesions in addition. It was striking that those whose lesions were exclusively genital reported for consultation much earlier. Drug history was the mainstay of diagnosis. Provocation tests with graded doses of the suspected drug(s) were undertaken in all cases. Tetracycline was the commonest causative drug, followed by oxyphenbutazone and acetylsalicylic acid.

Introduction

Non-venereal genital sores are rare.^{1 2} They may, however, pose a diagnostic problem as their morphological features may simulate those of the ulcerative sexually transmitted diseases (STDs), though the appropriate microbiological tests are usually successful in identifying the latter.¹⁻⁵ Despite this, fixed drug eruptions may baffle the clinician who is unaware of this clinical entity. Fixed drug eruptions of the genitals may be confused with herpes genitalis. We report here a series of 29 patients presenting with fixed drug eruptions so that doctors can recognise the clinical features.

Patients and methods

All patients presenting with genital lesions were screened for fixed drug eruptions. The diagnosis was suspected in 29 of 736 patients. In each case a careful history, including that of risk of infection and details of onset of the eruption and its evolution, was recorded. In particular, recurrences were noted. The genitals were examined and the morphology of the lesion noted. An endeavour was made to screen the entire skin surface and mucous membranes for similar lesions. Venereal ulcers were excluded by dark ground microscopy for *Treponema pallidum* and examination of Gram stained smears for *Haemophilus ducreyi* and of a tissue smear for Donovan bodies.¹⁻⁵ Cytological examination of the lesion for the presence of balloon cells and multinucleated giant cells was performed to exclude herpes genitalis.^{1 2} Serological tests for syphilis comprising the Venereal Disease Research Laboratory (VDRL) test and *T pallidum*

haemagglutination assay (TPHA) were also undertaken.^{1 2} Only then was a provisional diagnosis of fixed drug eruption made. A detailed history of drug intake was subsequently taken.⁶ At times, the patients were not aware of the importance of this aspect. They were therefore asked about the use of any drug that they might have taken, with or without prescription, for trivial ailments. Accordingly, a list of suspected drug(s) was prepared and in each patient a provocation test was undertaken.⁷ The test was started with one eighth of a single therapeutic dose, followed if necessary by a gradual increase to a quarter, a half, one dose, or one dose twice or thrice a day until the existing lesion was reactivated. A positive provocative test was marked by the appearance of itching or burning, or both, in the lesion(s), which eventually became oedematous and surrounded by an erythematous halo.

Results

Of the 29 patients, 15 men had exclusively genital lesions. Fourteen others (12 men and two women) had cutaneous lesions in addition. Their ages ranged from 10 to 48 (mean 31.3) years. The duration of the disease varied from one week to eight years. Significantly, most of those who had only genital lesions reported to the clinic much earlier (one week to three years; mean 7.9 months) than those with cutaneous eruptions, who consulted us after a mean of 31.7 months (range six months to eight years).

CLINICAL FEATURES

Table I shows that genital lesions were usually single and the glans penis was most commonly affected. Fixed drug eruptions presented three clinical variants. In 12 patients the lesions were well defined,

Address for reprints: Dr V N Sehgal, A/6 Panchwati, Delhi-110033, India

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oedematous, vesicular, sometimes showing superficial erosion, and surrounded by an erythematous halo. In 11 patients the lesions were in the form of well demarcated oedematous plaque, which was either surmounted or surrounded by erythema (figure). The remaining six patients presented primarily with superficial erosions after developing evanescent superficial flaccid bullae. The lesions were generally preceded or accompanied, or both, by itching (in 65%) and burning (in 70%). Regional lymphadenopathy was conspicuously absent.

CAUSATIVE DRUGS

Table II shows the causative drugs, as confirmed by provocation testing. Tetracycline was the commonest offender (31%), followed by oxyphenbutazone and acetylsalicylic acid (13.8% each).

Discussion

Genital fixed drug eruptions cause apprehension in the sufferer and confusion to the medical attendant about their possible venereal origin. The patient, therefore, reports fairly early for medical assistance to allay his anxiety. This has been clearly borne out by our study. STDs can be excluded by a negative temporal association between sexual exposure and the appearance of lesion(s) and by undertaking the relevant laboratory procedures. The fixed drug eruption can be diagnosed by its characteristic morphological features, namely single, well defined, superficial, erosive lesions with no regional



FIGURE Fixed drug eruption of glans penis.

TABLE I Genital sites affected by fixed drug eruptions in 29 patients

Site	No (%) of cases
Glans penis	22 (75.86)
Prepuce	5 (17.24)
Vagina	1 (3.45)
Vulva	1 (3.45)

TABLE II Drugs associated with fixed drug eruptions in 29 patients

Drug	No (%) of cases
Tetracycline	9 (31.03)
Oxyphenbutazone	4 (13.80)
Acetyl salicylic acid	4 (13.80)
Dipyron (Metamizol)	2 (6.90)
Co-trimoxazole	2 (6.90)
Paracetamol	2 (6.90)
Ampicillin	1 (3.45)
Sulphadiazine	1 (3.45)
Sulphaguanidine	1 (3.45)
Quiniodochlor	1 (3.45)
Broxyquinoline	1 (3.45)
Heroin	1 (3.45)

lymphadenopathy. The lesion is preceded and accompanied by itching and burning. Patients often do not relate their complaints to the use of drugs. They may also be unaware of the nature of drugs consumed by them. This is especially important in developing countries. A drug history should therefore be pursued thoroughly and systematically. In cases where the nature of the drug is not known to the patient, eliciting the complaint for which the drug was taken may be helpful. Then the doctor may prepare a list of suspected drugs commonly used in that region for that complaint.

Provoking the lesion(s) with the suspected drug not only confirms the diagnosis and prevents recurrences, but also allays the anxiety of the patient regarding the venereal origin of the disease. Provocation testing is both safe and reliable and must be done to confirm the cause of fixed drug eruptions.^{6,7} Administration of graded doses is the rational approach so as to elicit the signs of reactivation at the minimum dose.⁷

Drugs that cause fixed drug eruptions differ from one region to the other depending on the pattern of morbidity, range and availability of drugs, prescribing habits of the medical practitioners, socioeconomic status of the community, and the adherence to drug control measures.^{6,7} It is no longer possible to prepare a list of common causes of drug eruptions that would remain valid for more than a few years.⁶ Studying the causative agents of a drug eruption is therefore worthwhile from time to time. Tetracycline has often

been incriminated in causing genital fixed drug eruptions,^{8,9} and was also found to be the commonest cause in our study. It has been suggested that genitalia are predisposed to fixed drug eruptions by underlying STDs, but this was not found in our study.^{8,9} Significantly, during the one year of the study reported here, no patient developed a fixed drug eruption because of the drug treatment instituted for any STD.

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